REMARKS

Status Summary

In this Amendment, no claims are added and no claims are canceled. Therefore, upon entry of this Amendment, claims 22-39 will remain pending.

A clarifying amendment is proposed to claim 29 to indicate that the connection status and call state information stored in the backup call server relates to calls in progress through the media gateway. This limitation was previously presented in element (c) of claim 1. Accordingly, entry of this amendment should not raise new issues or require further search. Entry of the amendment to claim 29 is respectfully requested.

Claim Rejections 35 U.S.C. § 112

Claims 22 and 34 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. With regard to claim 22, the Official Action indicated that the claim limitation "selecting a media gateway through which a call associated with the signaling message will be routed" is not disclosed in the specification. Applicants respectfully disagree. With regard to this claim limitation, Applicants respectfully direct the Examiner to Figure 7 and the associated description on pages 20-22 of the present specification. In Figure 7, block **604A** represents call tables that are maintained by a call server module **202**. The call tables include a routing table **701** that maps trunk groups to media gateways. On page 20, beginning at line 24, the present specification states:

> Call server module **202** includes call processor **604** and one or more call tables **604A** for maintaining call state information and setting up a connection using media gateway. Figure 7 illustrates exemplary call tables **604A** that may be stored in memory on call server module **202**. . . . Routing table **701** maps trunk groups to media gateways and SS7 routing sets. (See page 20, line 24 through page 21, line 8 of the present specification.)

On page 22, the present specification states:

> In step **ST3**, call processing node **200** determines a trunk group for the outgoing trunk using the called party number and translation table **700** in Figure 7. In Figure 7, translation table **700** indicates that the called party digits 919-787-xxxx corresponds to trunk group TG1. (See page 22, lines 14-18 of the present specification.)

From Figure 7, trunk group TG1 in routing table **701** corresponds to media gateway ALPHA. The passages above indicate that the call server uses the translation table and the routing table to select a trunk group for a call. Since the specification indicates that the call server selects a trunk group, and routing table **701** in Figure 7 indicates that a trunk group corresponds to a media gateway, Applicants respectfully submit that the specification supports the claim limitation of "selecting a media gateway through which a call associated with the call signaling message will be routed." Accordingly, it is respectfully requested that the rejection of claim 22 as lacking written description under 35 U.S.C. § 112 should be withdrawn.

With regard to claim 34, the Official Action indicates that the claim limitation "the link interface module and the second call server modules each comprising printed circuit boards" is not disclosed in the specification. Applicants respectfully disagree. On page 12 beginning at link 22, the present specification states:

> As used herein, the terms "modules" or "cards" refer to printed circuit boards that are removably connectable to IMT bus **207** and that are physically housed in shelves, such as shelves **301** and **302**. (See page 12, lines 22-24 of the present specification.)

Since the term "module" is defined in the specification to mean "printed circuit board" and is used to describe both the link interface and call server functionality, it is respectfully submitted that the specification provides support for the claim limitation that the modules comprise printed circuit boards. Accordingly, it is respectfully requested that the rejection of claim 34 as lacking written description under 35 U.S.C. § 112, first paragraph, be withdrawn.

Claim Rejections 35 U.S.C. § 103

Claims 22-27 and 29-39 are rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,205,557 to Chong et al. (hereinafter, "Chong") in view of U.S. Patent No. 6,205,557 to Denman et al. (hereinafter, "Denman"). This rejection is respectfully traversed.

The present invention, for example as claimed in independent claims 22 and 29, includes a scalable call processing node and a method for call server module switchover in a scalable call processing node in response to a call server failure. In particular, in claim 22, a scalable call processing node includes a link interface module and first and second call server modules. The link interface module identifies SS7 signaling messages as a requiring processing by a call server and selects a call server for processing the messages. One call server module functions as a primary call server for selecting a media gateway through which a call associated with the call signaling

message will be routed and performs media gateway call management functions for establishing the call in the media gateway. The second call server module stores connection status and call state information regarding calls in progress through the media gateway and functions as a backup call server. The second call server switches operation to become the primary call server in response to failure of the first call server. Examples of the call state and the connection status information regarding calls in progress in the media gateway that is stored in the backup call server includes the call state information illustrated in state table **705** and the connection status information illustrated in endpoint table **703**. Because such information is stored on both the primary and secondary call servers, sub-second switchover can occur when the primary call server fails.

In paragraph 6, the Official Action states:

> However, Chong fails to teach "selecting a media gateway through which a call associated with the call signaling message will be routed and for performing media gateway call management functions for establishing the cal in the media gateway". Denman teaches selecting a media gateway through which a call associated with the call signaling message will be routed and for performing media gateway call management functions for establishing the call in the media gateway (abstract; col. 7, lines 38-42, col. 15, lines 23-35.) Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chong to allow selecting a media gateway through which a call associated with the call signaling message will be routed and for performing media gateway call management functions for establishing the call in the media gateway in order to function as a media gateway controller to route the call. (Emphasis added.) (See paragraph 6 of Official Action dated February 27, 2004.)

From this passage, the Official Action indicates that even though Chong fails to disclose a call server that selects a media gateway or performs media gateway management

functions, it would be obvious to modify Chong to provide such functions in order to provide a media gateway controller. However, there is no motivation in Chong or Denman for modifying the call server of Chong to provide a media gateway controller as taught by Denman. Database nodes **103** and **104** illustrated in Figure 2 of Chong each include an active call server **140** and a standby call server **141**, as illustrated in Figure 3. Call servers **140** and **141** are components of a database **103**. (See Figure 3 of Chong.) According to Chong, "the database **103** evaluates the call information and returns instructions via signaling network **102** to the switch **101** to complete the call connection." (See column 2, lines 47-49 of Chong.) Thus, from this passage and Figure 3, rather than teaching a media gateway controller, Chong teaches that database **103**, of which active and standby call servers **140** and **141** are a part, terminates queries and responses to the queries. In contrast, a media gateway controller receives call setup commands from end offices and formulates corresponding media gateway control commands. Thus, there is nothing in Chong that suggests modifying databases **103** and **104** to provide media gateway controller functionality.

Moreover, there is nothing in Denman to suggest modifying database nodes that terminate and respond to queries to provide media gateway controller functionality. Denman is directed to a method for providing packet-switch telephony. According to Denman, a call server **214** functions as a media gateway controller for a PSTN trunking media gateway and a wireless mobility server. (See Abstract of Denman.) However, there is absolutely no teaching or suggestion of modifying a database node as taught by Chong to provide media gateway controller functionality. Chong and Denman use the term "call server" to mean very different things. In Chong, "call server" means

"database node that terminates queries and provides responses." In Denman, "call server" means "node that functions as a media gateway controller."

As the Federal Circuit has repeatedly stated, an obviousness rejection "cannot be established by combining the teaching of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." (See *In re Fine* 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988) (quoting *In re Keller*, 642 F.2d 413, 525, 208 U.S.P.Q. 871, 881 (CCPA 1981)). Since there is no teaching or suggestion in Chong or Denman to modify the database end node of Chong to provide a media gateway controller, it is respectfully submitted that the rejection of the claims as unpatentable over Chong in view of Denman should be withdrawn for this reason alone.

Even assuming for the sake of argument that it would be obvious to combine the disclosures of Chong and Denman, the combined disclosures of Chong and Denman fail to teach or suggest providing first and second call servers wherein the second call server stores connection status and call state information regarding calls in progress through the media gateway. According to Chong, both standby call server **140** and active call server **141** discard information once a call is connected. For example, Chong states:

> The query processor **170** determines that the connection is established by means of its internal logic or by means of a message received by the active call server from the switch **101**. The query processor **170** then deletes the call information from the register **190** and sends a message to the standby call server to also delete the call information for that call. In the example of a simple call, the query processor **170** deletes the call information when the call connection is completed. Because the call information was not copied to backup call server **141**, the query processor does not send a delete message to the backup call server **141**. (See column 4, lines 41-52 of Chong.)

From the passage above, Chong discloses that for a complex call, both the active and standby call servers delete all information related to the call when the call is connected. For simple calls, the primary call server deletes the call information when the call is connected and the backup call server does not store the call information. Accordingly, because Chong teaches that call state information is deleted when a call is connected, Chong teaches away from storing connection status and call state information regarding calls in progress through the media gateway as claimed.

Denman likewise fails to teach or even remotely suggest storing, in a backup call server, connection status or call state information regarding calls in progress in the media gateway. According to Denman, call server **214** performs media gateway controller functions for PTMG **225** and WMS **216**. (See Abstract of Denman.) However, there is absolutely no teaching or suggestion of a backup call server, not to mention a backup call server that stores call state and connection status information regarding calls in progress in a media gateway. Accordingly, because Chong and Denman fail to teach or even remotely suggest the claimed invention, it is respectfully submitted that the rejection of claims 22 and 34 and their respective dependent claims should be withdrawn.

Claim 28 was rejected as unpatentable over Chong in view of Denman and further in view of U.S. Patent Publication No. US 2002/0057782 to Haruta (hereinafter, "Haruta"). This rejection is respectfully traversed.

Claim 28 depends from claim 22. As stated above, Chong fails to teach or even remotely suggest a scalable call processing node where a first call server module functions as a primary call server module and a secondary call server module stores

connection status and call state information regarding calls in progress through the media gateway. Haruta likewise lacks such teaching or suggestion. Haruta is directed to call center and is not even related to media gateway management. (See paragraph [0000] of Haruta.) The state table referenced in paragraph [0099], on page 5 of Haruta relates to the number of calls queued by an automatic call distribution group. (See paragraph [0101] of Haruta.) There is absolutely no teaching or suggestion that the state information includes call state or connection status information regarding calls in progress in a media gateway. Accordingly, it is respectfully requested that the rejection of claim 28 be withdrawn.

CONCLUSION

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. **50-0426**.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

Date: August 13, 2004 By: _____

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Enclosure